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IN THE CLAIMS

- 1. (Currently amended) A magnetorheological damper, the damper comprising:
- a cylindrically shaped housing;
- a magnetorheological fluid disposed in the cylindrically shaped housing;
- a piston assembly disposed within the cylindrically shaped housing in sliding engagement with the cylindrically shaped housing defining a first chamber and a second chamber, wherein the piston assembly comprises a plurality of cylindrically shaped fluid passageways extending from the first chamber to the second chamber, and at least one electromagnet, wherein the cylindrically shaped fluid passageways are formed from a plurality of annular plates stackedly arranged, wherein each one of the plurality of annular plates comprise a plurality of circular openings that when aligned with the other ones of the plurality of annular plates form the cylindrically shaped fluid passageways; and

a power supply in electrical communication with the at least one electromagnet.

- 2. (Original) The magnetorheological damper of Claim 1, wherein the plurality of cylindrically shaped fluid passageways defines a cross sectional area of the piston assembly of at least about 30 to about 70 percent.
 - 3. (Canceled)
- 4. (Currently amended) The magnetorheological damper of Claim 3 Claim 1, wherein each one of the plurality of annular plates comprising the plurality of circular openings
- 5. (Original) The magnetorheological damper of Claim 1, wherein the cylindrically shaped fluid passageway has a diameter that increases from the first chamber to the second chamber.
- 6. (Original) The magnetorheological damper of Claim 1, wherein the cylindrically shaped fluid passageway has a diameter that decreases from the first chamber to the second chamber.

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- 7. (Original) The magnetorheological damper of Claim 1, further comprising a third chamber defined by a second floating piston and an end of the housing, wherein the third chamber is filled with an inert gas.
 - 8. (Original) A magnetorheological damper, the damper comprising:
 - a cylindrically shaped housing;
 - a magnetorheological fluid disposed in the cylindrically shaped housing;
- a piston assembly disposed within the cylindrically shaped housing in sliding engagement with the cylindrically shaped housing defining a first chamber and a second chamber, wherein the piston assembly comprises an open cell porous media comprising a plurality of fluid passageways extending from the first chamber to the second chamber, and at least one electromagnet centrally disposed in the piston assembly; and
 - a power supply in electrical communication with the at least one electromagnet.
- 9. (Original) The magnetorheological damper of Claim 8, wherein the fluid passageways have circular or polygon shaped cross sectional openings.
- 10. (Original) The magnetorheological damper of Claim 8, wherein the open cell porous media comprises a plurality of stackedly arranged sheets, wherein each sheet is a rigid lattice network of nonmetallic material having hexagonally shaped openings.
- 11. (Original) The magnetorheological damper of Claim 8, wherein the fluid passageways formed in the open cell porous media have a cross sectional area of about 30 to about 70 percent.
- 12. (Original) The magnetorheological damper of Claim 8, wherein the open cell porous media comprises a rigid foam comprising a plurality of irregularly shaped fluid passageways extending from the first chamber to the second chamber.
- 13. (Original) The magnetorheological damper of Claim 8, wherein the fluid passageways have different size and/or shaped openings.

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14. (Original) The magnetorheological damper of Claim 8, further comprising a third chamber defined by a floating piston and an end of the housing, wherein the third chamber is filled with an inert gas.